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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/820,813

04/09/2004

Scong-geun Park

1572.1304

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08/07/2006

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EXAMINER

SURYAWANSHI, SURESH

ART UNIT

PAPER NUMBER

2115

DATE MAILED: 08/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/820,813

Applicant(s)

PARK, SEONG-GEUN

Examiner

Suresh K. Suryawanshi

Art Unit

2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/9/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-31 are presented for examination.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 17-21 and 29-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Dickie (US Patent 6,798,647).

4. As per claim 17, Dickie discloses a portable computer, comprising:

an auxiliary system comprising a first wireless sending/receiving part and a display part [Fig. 1 and 4; a PDA];

a second wireless sending/receiving part [Fig. 1 and 4; col. 3, lines 14-17, 55-61; PDA can communicate with the portable computer via IR or RF method]; and

a mounting part on a side of a casing to mount the auxiliary system, wherein data of the main system is supplied to the auxiliary system wirelessly, through the first and second wireless sending/receiving parts, or through the mounting part [Fig. 1; col. 2, lines 1-14; col. 3, lines 14-17, 55-61; PDA can communicate with the portable computer via IR or RF method].

5. As per claim 18, Dickie discloses a display panel, wherein the display part of the auxiliary system displays an operating panel of a multimedia file when the display panel is opened to serve as an additional display part of the portable computer [Fig. 1].
6. As per claim 19, Dickie discloses that the auxiliary system is an embedded controller having an operating system independent of the portable computer [Fig. 1; col. 3, lines 22-27].
7. As per claim 20, Dickie discloses that the embedded controller controls the auxiliary system to serve as a web-pad mode or to operate in a PIMS mode according to whether the second wireless sending/receiving part of the main system is turned on [Fig. 1; col. 2, lines 1-14; col. 3, lines 14-17, 55-61; PDA can communicate with the portable computer via IR or RF method].
8. As per claim 21, Dickie discloses that the auxiliary system and the main system are connected through a predetermined cable to send/receive data between the auxiliary system and the main system [Fig. 1 and 4; col. 3, lines 8-21].

9. As per claim 29, Dickie discloses a portable computer capable of receiving an auxiliary system comprising a first wireless sending/receiving part and a display part [Fig. 1; col. 3, lines 14-17, 55-61; PDA can communicate with the portable computer via IR or RF method], the portable computer comprising:

a second wireless sending/receiving part [Fig. 1 and 4; col. 3, lines 14-17, 55-61; PDA can communicate with the portable computer via IR or RF method];

a mounting part on a side of a casing to receive the auxiliary system [Fig. 1; col. 2, lines 1-14];

a selecting part selecting whether the data of the main system is displayed on the display part [Fig. 1 and 4; inherent to the system as an operator can choose to display the data on the PDA]; and

a controller reading data of the main system and transmitting the data to the auxiliary system when displaying the data of the main system on the display part, or supplying an operating signal of a PDA (Personal Digital Assistant) mode to the auxiliary system when not displaying the data of the main system on the display part, wherein data of the main system is supplied to the auxiliary system wirelessly, through the first and second wireless sending/receiving parts, or through the mounting part [Fig. 1 and 4; col. 3, lines 14-27, 55-61].

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10. As per claim 30, Dickie discloses a portable computer system, comprising:

an auxiliary system comprising a display part and an embedded controller [Fig. 1 and 4; a PDA]; and

a main system comprising

a display panel [Fig. 1 and 4; a portable computer with a display panel],

a data storing part storing data [Fig. 1 and 4; storages],

a mounting part mounting the auxiliary system thereto [Fig. 1 and 4; col. 1, lines 1-14],

a mounting sensing part sensing whether the auxiliary system is mounted on the mounting part [Fig. 3 and 5; detect docking of PDA in portable computer; col. 5, lines 9-10], and

a switching part supplying electric power to the auxiliary system when the mounting sensing part senses that the auxiliary system is mounted on the mounting part, wherein the embedded controller controls the auxiliary system to serve as a web pad mode or to operate in a PIMS mode according to whether the second wireless sending/receiving part of the main system is turned on [Fig. 3 and 4; col. 1, lines 1-14; col. 3, lines 20-21; col. 5, lines 9-10; PDA can be used as a web pad mode or to operate in a PIMS mode accordingly].

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-16, 22-28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickie (US Patent 6,798,647) in view of Ohtsuki (US Patent 5,471,621).

13. As per claim 1, Dickie discloses a portable computer system, comprising:

an auxiliary system comprising

a display part [Fig. 1 and 4; a PDA with a touch screen display], and

a first wireless sending/receiving part [Fig. 1 and 4; a PDA; col. 3, lines 14-17, 55-61; PDA can communicate with the portable computer via IR or RF method]; and

a main system comprising

a display panel [Fig. 1 and 4; a display panel of a portable computer],

a data storing part storing data [Fig. 1 and 4; Storages],

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a second wireless sending/receiving part [Fig. 1 and 4; col. 3, lines 14-17, 55-61; PDA can communicate with the portable computer via IR or RF method],

a mounting part mounting the auxiliary system thereto [Fig. 1; col. 2, lines 1-13; a portable computer with integrated docking cradle to dock the a PDA],

a mounting sensing part sensing whether the auxiliary system is mounted on the mounting part [Fig. 3 and 5; detect docking of PDA in portable computer; col. 5, lines 9-10], and

a switching part supplying electric power to the auxiliary system when the mounting sensing part senses that the auxiliary system is mounted on the mounting part [Fig. 4; col. 1, lines 1-14; col. 3, lines 20-21; col. 5, lines 48-50],

wherein data of the main system is supplied to the auxiliary system wirelessly, through the first and second wireless sending/receiving parts, or through the mounting part [Fig. 1 and 4; col. 3, lines 14-17, 55-61],

when displaying the data of the main system on the display part of the auxiliary system, the main system transmits the data stored in the data storing part to the auxiliary system to process and to display the data of the main system on the display part [Fig. 1 and 4; col. 3, lines 22-27; inherent to the system as either one can process the data and an operator can use either one to display the dada].



Dickie does not expressly disclose about a power saving mode when not displaying the data of the main system on the display part of the PDA, the portable computer stops the electric power to the PDA. But a routineer in the art would know about such a power saving operation in view of a portable computer that runs through a battery to extend the life of the battery.

However, Ohtsuki clearly discloses that the power supply for the individual input/output units in a portable computer is selectively turned on and off so as not to supply the power to those input/output units not in use, so that the power consumption of the entire system can be reduced [col. 1, lines 8-10, 62-66]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are related to battery operated portable computers. Moreover, utilizing the technique of power consumption disclosed by Ohtsuki as PDA in the portable computer is like one of the input/output units, so that the power consumption of the entire system will be reduced, clearly benefit the system disclosed by Dickie.

14. As per claim 22, Dickie discloses a method of controlling a portable computer system comprising an auxiliary system comprising a display part and a first wireless sending/receiving part, and a main system comprising a display panel, a second wireless sending/receiving part, a mounting part mounting the auxiliary system thereto [Fig. 1 and 4], the method comprising:

allowing wireless communication between the main system and the auxiliary system through the wireless sending/receiving part [Fig. 1 and 4; col. 3, lines 14-17, 55-61; PDA can communicate with the portable computer via IR or RF method];

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determining whether the auxiliary system is mounted on a mounting part of the main system [Fig. 3 and 5; detect docking of PDA in portable computer; col. 5, lines 9-10];

supplying electric power to the auxiliary system when mounted on the main system [Fig. 4; col. 1, lines 1-14; col. 3, lines 20-21; col. 5, lines 48-50];

transmitting the data stored in the main system to the auxiliary system to process and to display the data of the main system on the display part when a user selects to display the data on the display part [Fig. 1 and 4; col. 3, lines 22-27; inherent to the system as either one can process the data and an operator can use either one to display the data].

Dickie does not expressly disclose about a power saving mode when not displaying the data of the main system on the display part of the PDA, the portable computer stops the electric power to the PDA. But a routineer in the art would know about such a power saving operation in view of a portable computer that runs through a battery to extend the life of the battery. However, Ohtsuki clearly discloses that the power supply for the individual input/output units in a portable computer is selectively turned on and off so as not to supply the power to those input/output units not in use, so that the power consumption of the entire system can be reduced [col. 1, lines 8-10, 62-66]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are related to battery operated portable computers. Moreover, utilizing the technique of power consumption disclosed by Ohtsuki as PDA in the portable computer is like one of the input/output units, so

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that the power consumption of the entire system will be reduced, clearly benefit the system disclosed by Dickie.

15. As per claim 31, Dickie discloses a computer readable storage medium controlling a computer and comprising a process of controlling a portable computer system which comprises an auxiliary system, which comprises a display part and a first wireless sending/receiving part, and a main system, which comprises a display panel, a second wireless sending/receiving part, a mounting part mounting the auxiliary system thereto [Fig. 1 and 4; col. 3, lines 14-17, 55-61; PDA can communicate with the portable computer via IR or RF method], the process comprising:

allowing wireless communication between the main system and the auxiliary system through the wireless sending/receiving part [Fig. 1 and 4; col. 3, lines 14-17, 55-61; PDA can communicate with the portable computer via IR or RF method];

determining whether the auxiliary system is mounted on a mounting part of the main system [Fig. 3 and 5; detect docking of PDA in portable computer; col. 5, lines 9-10];

supplying electric power to the auxiliary system when mounted on the main system [Fig. 4; col. 1, lines 1-14; col. 3, lines 20-21; col. 5, lines 48-50];

transmitting the data stored in the main system to the auxiliary system to process and to display the data of the main system on the display part when a user selects to display the data on the display part [Fig. 1 and 4; col. 3, lines 22-27; inherent to the system as either one can process the data and an operator can use either one to display the data].

Dickie does not expressly disclose about a power saving mode when not displaying the data of the main system on the display part of the PDA, the portable computer stops the electric power to the PDA. But a routineer in the art would know about such a power saving operation in view of a portable computer that runs through a battery to extend the life of the battery. However, Ohtsuki clearly discloses that the power supply for the individual input/output units in a portable computer is selectively turned on and off so as not to supply the power to those input/output units not in use, so that the power consumption of the entire system can be reduced [col. 1, lines 8-10, 62-66]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are related to battery operated portable computers. Moreover, utilizing the technique of power consumption disclosed by Ohtsuki as PDA in the portable computer is like one of the input/output units, so that the power consumption of the entire system will be reduced, clearly benefit the system disclosed by Dickie.

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16. As per claim 2, Dickie discloses that the auxiliary system is connected to web-servers through the first wireless sending/receiving part or the second wireless sending/receiving part [Fig. 1 and 4; col. 3, lines 14-17, 55-61].

17. As per claim 3, Dickie discloses that the auxiliary system further comprises:

a battery [Fig. 1 and 4; col. 3, lines 20-21].

Dickie does not expressly disclose about a power saving mode when not displaying the data of the main system on the display part of the PDA, the portable computer stops the electric power to the PDA. But a routineer in the art would know about such a power saving operation in view of a portable computer that runs through a battery to extend the life of the battery. However, Ohtsuki clearly discloses that the power supply for the individual input/output units in a portable computer is selectively turned on and off so as not to supply the power to those input/output units not in use, so that the power consumption of the entire system can be reduced [col. 1, lines 8-10, 62-66]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are related to battery operated portable computers. Moreover, utilizing the technique of power consumption disclosed by Ohtsuki as PDA in the portable computer is like one of the input/output units, so that the power consumption of the entire system will be reduced, clearly benefit the system disclosed by Dickie.

18. As per claim 4, Dickie discloses a charging part, and a control part reading the data stored in the data storing part and transmitting the data to the auxiliary system through the second wireless sending/receiving part when displaying the data of the main system on the display part, or supplying an operating signal of a PDA (Personal Digital Assistant) mode to the auxiliary system through the second wireless sending/receiving part when not displaying the data of the main system on the display part [Fig. 1 and 4; col. 3, lines 8-27; col. 5, lines 9-17].

19. As per claim 5, Dickie discloses when sensing that the auxiliary system is not mounted, the main system turns-off the switching part and stops charging the battery of auxiliary system to prevent a current leakage to the charging part [Fig. 3; col. 2, lines 1-14; col. 3, lines 20-21].

20. As per claim 6, Dickie discloses that display part of the auxiliary system comprises: a TSP (Touch Screen Panel) screen receiving a user input-signal, and a TSP controller to process the user input-signal through the touch screen, wherein when the embedded controller determines that the second wireless sending/receiving part of the main system is turned on, the embedded controller controls the auxiliary system to serve as a web-pad mode, according to the user input-signal [Fig. 4; col. 2, lines 1-14; col. 3, lines 14-17, 55-61; PDA can communicate with the portable computer via IR or RF method].

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21. As per claim 7, Dickie discloses when the embedded controller determines that the second wireless sending/receiving part of the main system is turned off, the embedded controller controls the auxiliary system to operate in a PIMS (Personal Information Management System) mode [Fig. 4; col. 3, lines 22-27].

22. As per claim 8, Dickie discloses that the auxiliary system further comprises: a DVO (Digital Video Output) port connecting part, and a power supplying port connecting part connected to the DVO port and the power supplying port [Fig. 1 and 4].

23. As per claim 9, Dickie discloses that the second wireless sending/receiving part of the main system and the first wireless sending/receiving part of the auxiliary system each comprises Blue Tooth or a UWB (ultra wideband) interface [Fig. 1 and 4; col. 2, lines 1-14].

24. As per claim 10, Dickie discloses that the mounting sensing part generates an electric signal when the auxiliary system is mounted on the mounting part of the main system and supplies the signal to the control part [Fig. 1 and 3; col. 2, lines 1-14; detect docking of PDA in portable computer; col. 5, lines 9-10].

25. As per claim 11, Dickie discloses that the auxiliary system provides wireless access to the main system to web-servers and to serve as a web-browser [Fig. 1 and 4; col. 3, lines 14-17, 55-61; PDA can communicate with the portable computer via IR or RF method].

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26. As per claim 12, Dickie discloses that the auxiliary system is connected to web-servers through the first wireless sending/receiving part of the auxiliary system to serve as a stand-alone web-browser [Fig. 1 and 4; col. 3, lines 14-17, 55-61; PDA can communicate with the portable computer via IR or RF method].

27. As per claim 13, Dickie discloses that the switching part is electrically connected to the charging part and the power supplying port of the mounting part to supply/cut-off the electric power charged in the charging part to the auxiliary system and through the power supplying port [Fig. 1 and 4; col. 2, lines 1-14; col. 3, lines 20-21].

28. As per claim 14, Dickie discloses that the main part further comprises: a selecting part selecting whether the data in the data storing part is displayed on the display part of the auxiliary system or on the display panel of the main system [Fig. 1 and 4; col. 3, lines 22-27; inherent to the system as either one can process the data and an operator can use either one to display the data].

29. As per claim 15, Dickie discloses that the selecting part comprises a predetermined button, a hot key, or a selecting program, where if the auxiliary system is mounted on the mounting part and is turned on, and a power supplying signal is transmitted from the auxiliary system through the mounting part or the second wireless sending/receiving part to the main system, the main system senses the power supplying signal and operates the selecting program [Fig. 1 and 4; col. 2, lines 1-14].



30. As per claim 16, Dickie discloses that the control part determines whether the auxiliary system is mounted based on a mounting sensing signal generated from the mounting sensing part [Fig. 1 and 3; col. 2, lines 1-14; detect docking of PDA in portable computer; col. 5, lines 9-10].

31. As per claim 23, Dickie discloses when the user selects to display the data of the main system on the display part of the auxiliary system, the main system reads the data stored therein and supplies the data to the auxiliary system through the second wireless sending/receiving part [Fig. 1 and 4; col. 2, lines 1-14; col. 3, lines 8-27].

32. As per claim 24, Dickie discloses when the user selects not to display the data of the main system on the display part of the auxiliary system, the main system supplies a PDA (Personal Digital Assistant) operating mode signal to the auxiliary system through the second wireless sending/receiving part and controls to operate the auxiliary system in the PDA mode [Fig. 1 and 4; col. 2, lines 1-14].

33. As per claim 25, Dickie discloses determining whether the second wireless sending/receiving part of the main system is turned on/off [Fig. 1 and 4; col. 3, lines 8-27].

34. As per claim 26, Dickie discloses controlling the auxiliary system to operate in a web-pad mode when the second wireless sending/receiving part is turned on and the auxiliary system is mounted on the mounting part of the main system [Fig. 1 and 4; col. 2, lines 1-14; col. 3, lines 8-27].

35. As per claim 27, Dickie discloses controlling the auxiliary system to operate in a PIMS (Personal Information Management System) mode when the second wireless sending/receiving part is turned off and the auxiliary system is not mounted on the mounting part of the main system [Fig. 1; col. 2, lines 1-14; Fig. 3; detect docking of PDA in portable computer; col. 5, lines 9-10].

36. As per claim 28, Dickie discloses that automatically transforming a web-pad mode to a PIMS (Personal Information Management System) mode through a user setting when the auxiliary system is not mounted on the mounting part of the main system [Fig. 1; col. 2, lines 1-14].

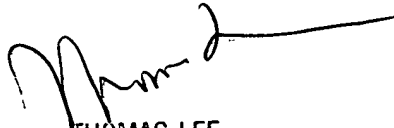
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suresh K. Suryawanshi whose telephone number is 571-272-3668. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sks  
July 24, 2006

  
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